COMMENTS ON THE PROPOSED VALIDATION OF *DIPLOSOMA* MACDONALD, 1859. Z.N.(S.) 1766

(see volume 23, pages 245–252)

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I support entirely the case Mr. Rowe has presented for the suppression of the name *Leptoclinum* Milne Edwards, 1841, in favour of *Diplosoma* MacDonald, 1858. I strongly believe, however, that Mr. Rowe's arguments for the validation of *L. listerianum* as the type species of *Diplosoma* are contrary to all the relevant articles of the Code of International Nomenclature; and especially contrary to the intent of that Code.

From 1841 most of Milne Edwards' nominal species for the genus *Leptoclinum* were clearly not congeneric with *Diplosoma*; and, in the absence of any objective definition of *Leptoclinum*, MacDonald in 1859 was right to establish a new genus for his species. The nature of the genus *Leptoclinum* Milne Edwards, was not defined, but by the indications of the majority of nominal species the genus was congeneric with *Didemnum* Savigny, 1816 (in fact, a junior synonym). This fact was clearly recognized by Van Name (1945) and, as Rowe has indicated, *Leptoclinum* was used in the sense of *Didemnum* by Sluiter, Herdman and Hartmeyer.

Lahille in 1890 recognized the congeneric nature of *L. listerianum* (and *L. gelatinosum*) with *D. rayneri*; removed the two former species from *Leptoclinum* to *Diplosoma*; and designated *L. listerianum* as type species, erroneously displacing *D. rayneri.*

Hartmeyer (1909a) recognized 4 of Milne Edwards nominal species as *Didemnum* spp. but instead of synonymizing *Leptoclinum* with *Didemnum* and removing the remaining nominal species, *L. listerianum* and *L. gelatinosum*, to *Diplosoma* as Lahille had done, he defined the characters of what was essentially a new genus, *Leptoclinum*, type species: *L. listerianum*. He later (1915) realized the priority of *Diplosoma* MacDonald when he combined the genera with *Leptoclinum* as the junior synonym. But he did not recognize the priority of its designated type species, *D. rayneri*, which had been clearly described and figured (colony, zooids *and* larvae) (article 67(k), 1961 Code). Unfortunately subsequent workers (including myself) have selected either Hartmeyer's (1909 or 1915) or Lahille's (1890) solutions. Mr. Rowe is to be congratulated on being the first to seek a definitive clarification of the situation. Nor does his request for the validation of *Diplosoma* necessarily involve a contradiction of priorities, as I have indicated above.

In support of the validation of *Diplosoma rayneri* as type species I add to the arguments above, the fact that the incidence of neither " rayneri " nor " listerianum " in the literature has been overwhelming. A simple count of the incidence of the names without regard for their meaning seems, especially in this case quite irrelevant. Generally the name " listerianum " has been used in relation to records from northern European waters; " macdonaldi " in relation to the species in American waters; " rayneri " for specimens from Australian waters; and " mitsukurii " for the species in Japan. The following geographic lists represent all records involving these most commonly occurring names. In no case are they complete in respect of other junior synonyms.

D. listerianum (Milne Edwards, 1841), from European waters
  L. listerianum Milne Edwards, 1841.
  D. listerianum; Hartmeyer, 1923; Thompson, 1934; Berrill, 1950; Millar, 1951; Kott, 1952; Carlisle, 1953; Millar, 1962.
D. listerianum (Milne Edwards, 1841) from African waters
  D. listerianum var. *koehleri* Michaelsen, 1915, 1919.
  D. listerianum; Millar, 1953, 1962.

(Millar, 1962 establishes the identity of specimens from Africa with European specimens; and reiterates, after Van Name, 1945, the probability of their synonymy with *D. macdonaldi* Herdman).

D. macdonaldi Herdman, 1886, from American waters
  D. macdonaldi Herdman, 1886; Van Name, 1902, 1930, 1945; Plough and Jones, 1937.
  L. macdonaldi; Hartmeyer, 1909; Van Name, 1918, 1921, 1924; Berrill, 1932.
D. rayneri MacDonald, 1859, from Australian and New Zealand waters
  D. rayneri MacDonald, 1859; Kott, 1962; Kott, 1966 (October).
  D. macdonaldi; Gottschaldt, 1898; Brewin, 1946, 1948, 1950, 1952.
(Lahille 1890, Hartmeyer 1909 and Kott 1962, 1966 suggested the synonymy of this species with *D. listerianum*).
D. mitsukurii Oka, 1927, from Japanese waters
  D. mitsukurii Oka, 1892, 1927.
  L. mitsukurii; Tokioka, 1963.

Thus there is no argument for *D. listerianum* as type species based on overwhelming incidence of the name—which has been used only for the species in European waters; or to a limited extent, by workers familiar with the species in Europe who have worked on collections from elsewhere (i.e. Africa). Only Grave (*D. macdonaldi*; 1927–1928) and Berrill (*D. listerianum*; 1935–36) have used the species for experimental work.

Kott (1962) records *D. rayneri* from 7 localities ranging from Freemantle to the Barrier Reef " numerous specimens available from each station . . ." and this cannot be construed as a " few records from Australian seas . . ." (Rowe, 1966) especially in relation to the total number of records of this species. The species is common in the intertidal region around the Australian coast, and is known as *D. rayneri*—a name not unknown universally, especially in relation to *Diplosoma* MacDonald—as it has been involved in discussions on the synonymy of the genus since 1890, persisting until today.

Although type specimens are not available no neotype is required: the species is adequately described by MacDonald 1859, Kott 1962, Berrill 1950, and others. No " complex zoological " problem is involved, the identity of species is not in question. The problem has been a reluctance to create synonyms without examination of material from other geographic areas (Van Name 1945, Millar 1962, Kott, 1962). Mr. Rowe, from the collections of the British Museum has now done this and assures us that the species are synonymous (Rowe 1966—*Ann. Mag. nat. Hist.*, 13 IX : 457).